

5'	GAC	GTG	TTC	GGC	AGC	GGG	ACG	CAC	CAT	TTC	AGT	TGT	GTT	CTT	GGT	TCA	TTC	CGT	54	
	63		18		27		81		90		99		45		36		5		108	
	GTC	TCG	GCG	ATG	TTG	CCT	AGA	GTC	TCG	ACG	TTC	CTA	CCT	CTT	CGC	CCC	CTT	TCC		
	M	F	P	R	V	S	T	F	L	P	L	R	P	L	S					
	117		126		135		144		153		162									
	CGC	CAC	CCT	TTG	TCC	TCT	GGG	AGC	CCG	GAG	ACA	TCA	GCG	GCT	GCG	ATT	ATG	CTA		
	R	H	P	L	S	S	G	S	P	E	T	S	A	A	A	I	M	L		
	171		180		189		198		198		207		207		216					
	CTC	ACT	GTT	CGG	CAC	GGA	ACA	GTC	AGG	TAC	CGC	AGT	TCA	GCG	CTG	TTG	GCC	CGG		
	L	T	V	R	H	G	T	V	R	Y	R	S	S	A	L	L	A	R		
	225		234		243		252		252		270									
	ACA	AAA	AAT	AAC	ATC	CAA	AGA	TAT	TTT	GGC	ACT	AAC	AGT	GTG	ATC	TGT	AGC	AAG		
	T	K	N	N	I	Q	R	Y	F	G	T	N	S	V	I	C	S	K		
	279		288		297		306		306		315		315		324					
	AAA	GAT	AAG	CAG	TCT	GTT	CGA	ACT	GAG	GAG	ACT	TCC	AAG	GAG	ACT	TCA	GAG	AGC		
	K	D	K	Q	S	V	R	T	E	E	T	S	K	E	T	S	E	S		
	333		342		351		360		360		378									
	CAA	GAC	AGT	GAA	AAG	GAA	AAT	ACG	AAA	AAA	GAC	TTG	TTA	GGC	ATT	ATT	AAG	GGC		
	Q	D	S	E	K	E	N	T	K	K	D	L	L	G	I	I	K	G		

FIGURE 1A

Y. *Yeast* *Yeast*

	387	396	405	414	423	432												
ATG	AAA	GTT	GAA	TTA	AGC	ACA	GTA	AAT	GTA	CGA	ACA	ACA	AAG	CCC	CCC	CCC	AAA	AGA
M	K	V	E	L	S	T	V	N	V	R	T	T	K	P	P	K	R	
	441	450	459	468	477	486												
AGA	CCA	CTT	AAA	AGT	TTG	GAA	GCT	ACA	CTT	GGC	AGG	C TT	CGA	AGA	GCT	ACA	GAA	
R	P	L	K	S	L	E	A	T	L	G	R	L	R	R	A	T	E	
	495	504	513	522	531	540												
TAT	GCT	CCA	AAG	AAG	AGA	ATT	GAG	CCC	CTG	AGT	CCT	GAG	TTG	GCA	GCT	GCA	GCA	
Y	A	P	K	K	R	I	E	P	L	S	P	E	L	V	A	A	A	
	549	558	567	576	585	594												
TCT	GCT	GTG	GCA	GAT	TCT	CTC	CCT	TTT	GAT	AAG	CAA	ACA	ACC	AAG	TCA	GAG	CTG	
S	A	V	A	D	S	L	P	F	D	K	Q	T	T	K	S	E	L	
	603	612	621	630	639	648												
CTG	AGC	CAG	CTC	CAG	CAG	CAT	GAG	GAA	GAG	TCA	AGG	GCA	CAG	AGA	GAT	GCA	AAG	
L	S	Q	L	Q	Q	H	E	E	E	S	R	A	Q	R	D	A	K	
	657	666	675	684	693	702												
CGA	CCT	AAA	ATT	AGT	TTC	AGT	AAC	ATA	ATA	TCA	GAT	ATG	AAA	GTT	GCC	AGA	TCT	
R	P	K	I	S	F	S	N	I	I	S	D	M	K	V	A	R	S	
	711	720	729	738	747	756												
GCT	ACA	GCT	AGA	GTT	CGT	TCA	AGA	CCA	GAG	CTT	CGG	ATT	CAG	TTT	GAT	GAA	GGC	
A	T	A	R	V	R	S	R	P	E	L	R	I	Q	F	D	E	G	

FIGURE 1B

Y D N Y P G Q E K T D L K R K R K N

TAT GAC AAT TAT CCT GGC CAG GAG AAG ACG GAT GAT CTT AAA AAA AGG AAA AAT
I F T G K R L N I F D M M A V T K E

ATA TTC ACA GGG AAA AGA CTT ATT AAT TTT GAC ATG ATG GCA GTT ACT AAA GAA
A P E T D T S P S L W D V E F A K Q

GCA CCT GAA ACA GAC ACA TCA CCT TCA CTT TGA GAT GTG GAA TTT GCT AAG CAG
L A T V N E Q P L Q N G F E E L I Q

TTA GCC ACA GTA AAT GAA CAA CCC CTT CAG AAT GGA TTT GAA GAG CTG ATC CAG
W T K E G K L W E F P I N N E A G F

TGG ACA AAA GAG GGG AAA CTA TGG GAG TTC CCA ATT AAC AAT GAA GCA GGT TTT
D D G S E F H E I F L E K H L E

1035 1044 1053 1053 1062 1071 1080
GAT GAT GGT TCA GAA TTT CAT GAA CAT ATA TTT CTG GAG AAA CAC CTG GAG
S F P K Q G P I R H F M E L V T C G

1089 1098 1107 1116 1125 1134
AGC TTT CCA AAA CAA CGG CCA ATT CGC CAC TTC ATG GAG CTG GTG ACT TGT GGC
S F P K Q G P I R H F M E L V T C G

FIGURE 1C

22. *Phragmites* *australis* (L.) Trin. *Phragmites* *australis* (L.) Trin. *Phragmites* *australis* (L.) Trin.

1143	1152	1161	1170	1179	1188
CTT TCC AAA AAC CCA TAT	CTT AGT GTT AAA CAG AAG	GTT GAA CAC	ATA GAG TGG		
L S K N P Y L S V K Q V E H I E W					
1197	1206	1215	1224	1233	1242
TTT AGA AAT TAT TTT AAT GAA AAA AAG GAT ATT CTA AAA GAA AGT AAC ATA CAG					
F R N Y F N E K K D I L K E S N I Q					
1251	1260	1269	1278	1287	1296
TTC AAT TAA GAC CAT GGA AAT TTT TAT TTC AAA CAA TTA GAG ATG GAT ATT ACA					
F N					
1305	1314				
ACT AAA TAA ATT AAT TGC					3'

FIGURE 1D

FIGURE 2A

1	M F P R V S T F L P L R P L S R H P L S S G S P E T S A A I M L L T V R H G T	035842
1	M L H R I P A F L R P R P F S G L P L S C G N R D V S V A - - V L P A A Q S G A	GI 1272669
41	V R Y R S S A L L A R T K N N I Q R Y F G T N S V I C S K K D K Q S V R T E E T	035842
39	V R - - - - - - - - - - T E N N I O R H E C T S R S I C S S K V D Q S V P A N E I	GI 1272669
81	S K E T S E S Q D S E K E N T K K D L L G I I K G M K V E L S T V N V R T T K P	035842
70	S Q K A A E S Q G R G K E T L K K D L L D I I K D M K V D L S T A N V K T P K P	GI 1272669
121	P K R R P L K S L E A T L G R L R R A T E Y A P K K R I E P L S P E L V A A S	035842
110	R G R K P S A S L E A T V D R L Q K A P E D P P K K R N E F L S P E L V A A S	GI 1272669
161	A V A D S L P F D K Q T T K S E L L S O L Q Q H E E E S R A Q R D A K R P K I S	035842
150	A V A D S L P F D K Q T T K S E L L R Q L Q Q H E E E L R A Q K D R E K R R I S	GI 1272669
201	F S N I I S D M K V A R S A T A R V S R P E L R I Q F D E G Y D N Y P G Q E K	035842
190	F T H I I S N M K I A K S P S G R A S T R P Q H Q I Q F D E D M D S S L K Q E K	GI 1272669
241	T D D L K K R K N I F D M M A V T K E A P E T D T S P S L W D V	035842
230	P T D F R K R K Y L F K G K R L S I F A D K A F A D E P P E P E A S P S L W E I	GI 1272669
281	E F A K Q L A T V N E Q P L Q N G F E E L I Q W T K E G K L W E F P I N N E A G	035842
270	E F A K Q L A S V A D Q P F E N G F E E M I Q W T K E G K L W E F P V N N E A G	GI 1272669

FIGURE 2B

321	F D D G S E F H E H I F L E K H L E S F P K Q G P I R H F M E L V T C G L S K	035842
310	L D D G S E F H E H I F L D K Y L E D F P K Q G P I R L F M E L V T C G L S K	GI 1272669
361	N P Y L S V K Q K V E H I E W F R N Y F N E K K D I L K E S N I O F N	035842
350	N P Y L S V K Q K V E H I E W F R N Y F N E K R D I L K E N N I A F T	GI 1272669